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Population distribution policies in Asia and the Pacific: current status and future prospects

Roland J. Fuchs

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PREFACE

This paper was originally prepared for presentation at the Conference on Urbanization and National Development held at the East-West Population Institute, January 25–29, 1982. Comments by both conference participants and anonymous reviewers proved helpful in revising the paper for publication.

ABSTRACT Governments of nearly all Asian and Pacific nations are dissatisfied with their current population distribution, and the overwhelming majority have already adopted policies to affect rates and patterns of internal migration or the configuration of their rural and urban populations. Reviews of population distribution programs suggest that they have had limited effectiveness and may have unintended consequences. Improvement in policies will require a reexamination of four policy-related issues: the scope of policies, the need for intervention, policy objectives, and instruments. Policies must be more carefully integrated with national economic planning, and the spatial effects of macropolicies must be assessed; program instruments must be more closely matched to the determinants of migration behavior. An improved data base is a fundamental prerequisite for policy improvement as is more careful monitoring and rigorous evaluation.

Throughout the developing world, the spatial distribution of population is increasingly viewed as a major developmental issue. The most recent United Nations Monitoring Report (UN, 1980) confirms the finding of earlier surveys (UN, 1979) that the governments of developing nations are now more concerned with problems of distribution than of fertility. In a July 1978 survey it was found that of the 116 governments in the less developed regions, 53 considered their current levels of fertility satisfactory but only six were content with the spatial distribution of their populations.[1]

The nations of the Asian and Pacific region reflect this global concern with population distribution as a policy issue. Of the 30 nations in the region (see Table 1), only two—Singapore and Nauru, both small island states—considered their spatial distribution of population to be "entirely acceptable" and intervention uncalled for. Eight nations viewed their distribution as "slightly unacceptable" and requiring limited intervention, while another five indicated their distribution was "substantially unacceptable" with "substantial" intervention necessary. Fifteen nations, fully half of those surveyed, believed their distribution was "extremely unacceptable" and in need of "radical intervention."

Why are so many governments dissatisfied with their current population distribution? There is no single explanation that holds for all

1 Whether this perception of relative importance is an accurate one is another matter. It overlooks, for example, the interdependence of population distribution problems and population growth rates.

TABLE 1 Perception of overall acceptability of spatial distribution of population, July 1978, by Asian and Pacific governments

Acceptability	Country
Entirely acceptable: no intervention required	Nauru
	Singapore
Slightly unacceptable: limited intervention required	Bhutan
	Burma
	Democratic People's Republic of Korea
	Malaysia
	Maldives
	Mongolia
	New Zealand
	Republic of Korea
Substantially unacceptable: substantial intervention required	Afghanistan
	Bangladesh
	China
	Sri Lanka
	Tonga
Extremely unacceptable: radical intervention required	Australia
	Fiji
	India
	Indonesia
	Iran
	Japan
	Kampuchea
	Laos
	Nepal
	Pakistan
	Papua New Guinea
	Philippines
	Samoa
	Thailand
	Vietnam

SOURCE: Compiled from UN (1980: table 73, pp. 119–20).

nations. It is more appropriate to identify a variety of factors that may lead to dissatisfaction, depending on national circumstances. In many developing nations, for example, the rates of rural-to-urban migration are considered excessive, since they may lead to population concentra-

tion in a limited number of urban centers that cannot adequately provide urban jobs and services. In the process, rural areas may lose their most educated youth who might otherwise have been the most productive and innovative of the rural labor force. More generally, problems may develop of spatial disparities in labor availability and employment opportunities, with a relative excess of labor available in old, settled agricultural regions as compared with newer frontier regions, or in the primate metropolitan areas as opposed to other urban centers. Population redistribution programs may be seen as necessary to reduce population pressure on fragile environments and agro-ecosystems (e.g., those in hill and mountain areas); to resettle nomads or consolidate rural villages in order to provide adequate health, educational, or other services; to settle border areas for purposes of national security; or to increase national integration through redistribution of ethnic groups. Very commonly, population redistribution programs have an equity objective: to reduce disparities in rates of growth among regions and in the accessibility of jobs and services among individuals. A powerful but unvoiced concern underlying programs in many nations is the fear of political, social, or ethnic instability that may result from major shifts in population and rapid growth of large cities.

This paper reviews the policies already adopted by Asian and Pacific nations in response to their perceived problems of population maldistribution. The first part of the paper provides a general overview of policy objectives, types of programs and policy measures, and their effectiveness or efficiency. The second part considers apparent policy deficiencies and suggests research needs and other possible avenues of policy improvement.

CURRENT DISTRIBUTION POLICIES IN THE REGION

Three aspects of current policies in the Asian and Pacific region may be usefully addressed in this brief overview: objectives, programs and instruments, and their effectiveness or efficiency.

Policy objectives

Three major objectives predominate in the region, as judged by the frequency of policy adoption (Table 2).[2] First, the deceleration or

2 The responses by individual nations to the UN survey should be treated with some caution, for they do not always correspond to policy objectives as found in other statements such as national development plans.

TABLE 2 Policies regarding spatial distribution of population adopted by Asian and Pacific governments

Region and country	Policies regarding basic trends in internal migration				Policies regarding modification of rural and urban configuration of settlement	
	Accelerate	No intervention	Decelerate	Reverse	Alteration of rural configuration	Alteration of urban configuration
China				x	x	x
Japan			x		x	x
Other East Asia						
Democratic People's Republic of Korea			x		x	x
Mongolia			x		x	x
Republic of Korea			x			
Eastern South Asia						
Burma			x		x	
Democratic Kampuchea				x	x	x
Indonesia			x		x	
Lao People's Democratic Republic				x	x	x
Malaysia		x			x	
Philippines				x	x	
Singapore		x				
Thailand			x			
Vietnam			x		x	x
Middle South Asia						
Afghanistan		x			x	
Bangladesh				x	x	
Bhutan	x				x	x

India		x		
Iran		x	x	x
Maldives		x	x	x
Pakistan		x		
Nepal		x	x	x
Sri Lanka		x	x	
Australia and New Zealand		x	x	
Australia				
New Zealand		x		x
Melanesia	x			
Papua New Guinea				
Micronesia-Polynesia	x			
Fiji				
Nauru		x	x	x
Tonga	x			
Western Samoa		x		
	x			

SOURCE: UN (1979:134).

reversal of rural-to-urban migration trends is apparently the most common goal: some 16 nations have policies to decelerate flows from rural to urban areas; another six, including several of the communist nations, have gone further and are attempting to reverse flows. The second major objective is to alter rural population distribution, in many cases through colonization or resettlement schemes. This goal was adopted in 20 nations. The third objective, altering urban configuration, usually through controls on primate city growth and development of small and intermediate-size cities, was adopted in 13 nations.

If the stated goals of individual Asian nations are examined in greater detail (Table 3), it is apparent that they reflect differences in national size, inherited patterns of settlement, resource endowment, and economic activity, as well as differing political perceptions of problems and needs. Commonly, nations have adopted multiple goals involving modification of both migration trends and aspects of rural and urban settlement patterns. Although policy objectives are occasionally stated in the form of fairly precise targets (e.g., Indonesia's transmigration goals), it is more common to find objectives formulated in more general terms. Thailand's Fourth National Economic and Social Development Plan (1977–81), which may be taken as an example, contained the following explicit population distribution objectives: (1) limiting the growth of the Bangkok Metropolitan Area; (2) developing regional growth centers outside of Bangkok; and (3) supporting intraregional as opposed to interregional migration, including rural-to-urban movement to regional centers (NESDB, 1977).

The vagueness of population distribution policy goals within national development plans is often matched by a failure to make explicit the connections between those goals and other aspects of the development plan (Pryor, 1974:11). Vertical linkages "upward" to development goals and "downward" to programs and projects are not clearly specified, nor are the horizontal linkages with economic, welfare, political, or other goals. Population distribution and redistribution objectives sometimes appear to have been prepared in isolation from other parts of the development plan and therefore seem abstract and unintegrated. This impression is further reinforced by the sectoral structure of most development plans, which "tends to disperse relevant elements through the plan volume(s)" (Pryor, 1974:17).

TABLE 3 Population distribution policies in selected Asian nations: goals, programs, and measures

Country	Goals	Programs and measures
Centrally planned		
China (PRC)	Slow rural-to-urban migration; reduce growth and decongest large cities; improve balance among regions and in urban hierarchy; develop agricultural and mineral resources in interior	Family planning; rustication program; development of new towns and growth centers; rural development programs; land colonization schemes
Mongolia	Facilitate rural-to-urban flow; increase number of cities and lower-order centers	Settlement of nomadic population; development of lower-order centers as industrial complexes
Vietnam	Reduce size of Ho Chi Minh City; transfer labor force from urban to rural areas; improve urban-rural and regional balance	Rustication of urban population; colonization of New Economic Zones; development of agricultural "green ring" around Ho Chi Minh City
Market/mixed		
China (Taiwan)	Decentralize population within Taipei and Kaohsiung; improve balance among regions and centers in hierarchy	Satellite towns; development of growth poles through infrastructure investment and tax incentives; improvement of social infrastructure in regions of out-migration

TABLE 3 *(continued)*

Country	Goals	Programs and measures
Indonesia	Reduce imbalance between Java and outer islands; reduce primary and uneven urban growth	Transmigration programs; rural and urban development in outer islands; restriction on Jakarta's growth; distribution of industrial activities
Republic of Korea	Control growth of Seoul; reduce imbalance in urban hierarchy; slow rural depopulation	Long-term physical plan for Seoul, including green belt; legislation for industrial location; fiscal and tax incentives/disincentives; construction of satellite cities; development of five growth poles; rural development through Saemaul Undong
Malaysia	Equalize regional development and distribution of economic benefits among ethnic groups; promote growth in Sabah and Sarawak; slow growth of major towns	Rural development (extension, credit, marketing, fertilizer subsidence, infrastructure); colonization and resettlement (FELDA): promotion of industrial development in low-income states (location incentives); growth centers; urban development and renewal, housing
Nepal	Reduce regional disparities between rural population and resources; reduce rural-rural migration; promote urban growth outside Kathmandu Valley	Integrated rural development in hill areas; improved transport and communication systems; development of small-scale industries in nonurban areas; growth centers; land resettlement

Pakistan	Reduce rural-to-urban migration; mitigate concentration of urbanization in a few, large cities and resulting problems of housing, services, unplanned development	Population planning; rural development including increased agricultural productivity, agro-industrialization, and services; more balanced development between rural and urban sectors, and between towns; improved urban services
Philippines	Reduce rural-to-urban migration; reduce concentration in Manila; promote balanced urban hierarchy and more even regional development	Reduction in population growth; integrated rural development; development of small and medium-sized cities through industrial dispersion and improvement of basic infrastructure and regional planning
Sri Lanka	Reduce metropolitan growth and rural-to-urban shift; promote rural resettlement	Rural resettlement; establishment of industrial and economic activities outside metropolitan area; welfare and income transfers to reduce rural-urban disparities; emphasis on provision of social services outside metropolitan core
Thailand	Limit growth of Bangkok; develop regional growth centers; promote intraregional rather than interregional migration	Decentralization of growth in Bangkok metropolitan area through new port, industrial, and government dispersal, taxes, land use controls; growth center policies; regional planning; rural development

SOURCES: UNPD and UNFPA (1979, 1981); Pryor (1979); Fuchs and Street (1979).

Policy programs and instruments

Individual nations clearly have adopted various explicit policy programs and instruments in response to perceived problems of migration and population maldistribution (Table 4). Included here are both programs with a primary goal of affecting population distribution and development programs that include population redistribution as at least a secondary goal. These programs may be categorized as follows:

1. "Closed city" programs, designed to constrain metropolitan growth by stopping or slowing down in-migration.
2. Rustication programs, designed to resettle urban residents in rural areas.
3. Programs designed to accommodate metropolitan growth by improving the urban habitat. There are many such programs; two with clear distribution implications are programs to improve housing and living conditions, in particular in slum and squatter settlements, and programs aimed at increasing urban efficiency by decentralizing growth in metropolitan areas through promotion of dormitory towns, satellite cities, and commuting.
4. Programs aimed at regional dispersion of urban growth through expansion of intermediate-size cities and regional centers.
5. Rural development and "agropolitan" programs, directed at retention of rural populations and the growth of rural service centers.
6. Land colonization schemes, designed to shift rural population to frontier rural areas with underdeveloped land resources.

As is evident from the above classification, population redistribution programs are often subsidiary components of more general spatial programs dealing with modernization and economic development, with the importance of the population redistribution component varying significantly from program to program.

The various types of redistribution programs constitute a package of individual measures or instruments that, taken as a group, are intended to achieve the program objectives. In selecting individual instruments, policymakers can choose from a broad range of economic, social, and administrative measures (Table 5). Such measures can be characterized as either positive, in the sense of offering incentives for in-migration to a particular locale, or negative, if they serve as disincentives or obstacles. They may be aimed directly at the individual or household but more commonly operate indirectly through employing

TABLE 4 Population redistribution programs, objectives, and instruments

Type of program	Migration/mobility objectives	Instruments commonly employed
Urban constraints		
"Closed city"	Reduce or slow in-migration to designated cities, including the metropolitan center	Tax disincentives; identity cards or internal passports, residence permits, registration of addresses; limitations on investment in industry or housing; discriminatory treatment in access to services by nonlegal residents; eviction of illegal residents, destruction of squatter housing
Rustication programs	Resettle urban residents in rural areas	As above plus the following: assignment of rural residence and work place; making ration coupons valid only in authorized place of residence
Accommodationist programs		
Slum and squatter settlement improvement	Accommodate to existing patterns of urban in-migration and growth by improving urban habitat, especially housing and related services	Legitimization of tenure in squatter settlements; upgrading of services and utilities; provision of prepared sites and basic services prior to occupancy
Dormitory towns and satellite city programs	Deconcentrate growth within metropolitan area by developing settlements in periphery	Infrastructure investment in metropolitan periphery; development of public transport and commuting facilities; housing project developments in peripheral settlements; industrial relocation grants and subsidies; zoning and other controls on further development in core

TABLE 4 *(continued)*

Type of program	Migration/mobility objectives	Instruments commonly employed
Promotion of growth in intermediate-size cities and regional centers	Channel migration to, and stimulate retention of, population in intermediate-size cities as alternative to metropolis	Infrastructure investments; incentives (grants, loans, subsidies) to employing organizations, particularly industrial firms; indirect incentives to individual migrants (housing developments, education, and medical service provision); direct incentives to individuals (job training and relocation grants)
Rural development		
Land colonization schemes	Resettle rural residents from overpopulated areas to new or underutilized agricultural areas	Infrastructure investments for land clearing, roads, dams, etc.; transfer payments for land acquisition; transfer of title; investment in productive facilities; provision of social services or technical assistance; credit provision; establishment of managing agency
Integrated rural development	Retain rural population and develop rural service centers	Land reform; provision of credit and extension services; physical infrastructure investments, including roads; development of marketing network; vocational training and education; expansion of off-farm employment; creation of rural market towns

SOURCES: Findley (1977); Demko and Fuchs (1981).

TABLE 5 Major population distribution measures

	Policy emphasis	
Directed toward	Incentives	Disincentives
Employing organizations	Direct government investment and location of state-owned enterprises, offices, and facilities; subsidies (grants, loans, tax rebates) to private sector on location basis; spatial industrial infrastructure policies (transport, utilities, etc.); government, procurement, and location policies; transport rate adjustments	Relocation of government enterprises, offices, facilities; restrictions, permits, licenses, tax surcharges for private-sector locations of industry and offices; land use or indirect controls on location
Individuals and families	Social infrastructure investments (housing, education, medical services, etc.); mobility grants, allowances, and loans; employment or other information agencies; job training and human resource development programs; various rural development measures—land reform, credit, extension services, public works	Administrative and legal measures (residence and work permits); discriminatory treatment of legal and illegal residences in access to services; slum clearance and squatter resettlement measures; residential zoning limitations

SOURCE: Fuchs (1981b).

organizations. Despite the range of choices available to policymakers, in practice the greatest emphasis is on economic measures, particularly those intended to affect *labor demand* spatially through effects on employing organizations. Measures aimed directly at individuals and households are much less common, but here too the emphasis is on economic measures that spatially affect *labor supply*.

Effectiveness of policies

The widespread adoption of population policies in the Asian and Pacific region has not yet been followed by rigorous evaluations of their effectiveness, perhaps because of the substantial difficulties involved in such evaluations. As already noted, the goals of population distribution policies are often imprecise and the programs embedded in more general spatial development programs, complicating the choice of criteria for determining effectiveness. The appropriate time periods are unclear. As with all policy evaluation, an *ex post facto* approach creates difficulties in controlling variables other than policy instruments and in isolating policy-induced effects from autonomous trends.

Nevertheless some impression of the effectiveness of existing policies can be obtained from recent general reviews of population distribution policies in Asia (Oberai, 1981; Day and Demko, 1981; Laquian, Aquino, and Postrado, 1981). These reviews synthesize a considerable number of country or program-focused studies, the great majority of which are descriptive assessments. The major conclusion of these reviews is that population distribution policies in the Asian region have had but limited effectiveness, a conclusion similar to that found in global reviews (Findley, 1977; Gosling and Lim, 1979; Demko and Fuchs, 1981) and in reviews of policies implemented in other regions (Fuchs and Demko, 1979; Abumere, 1981; Mabogunje, 1981).

Although the overall effectiveness of population distribution policies is limited, the experience varies considerably depending on the type of program involved:

Closed-city Programs

These represent attempts to limit primate city growth through legal and administrative measures affecting in-migration. Major examples in Asia include the attempts to limit in-migration to Jakarta through registration, permits, and controls on the informal sector; to Manila through discriminatory education fees and industrial controls; and to Seoul through taxes and land use planning (Simmons, 1979). The experience suggests that although such programs may slow in-migration, they may also create undesirable side effects. Administrative measures are often evaded through bribery; limits on growth within the administratively defined "closed city" are accompanied by increases in commuting and migration to adjoining areas of the metropolitan area; if

successful, the program may result in undesirable demographic (e.g., aging) or economic consequences for the "closed" city.

Rustication Programs

Programs intended to transfer urban population to rural areas have been adopted by several of the communist nations in Asia. Judged only demographically, they have been successful in accomplishing major population transfers in brief periods. In China it is estimated that between 10 and 15 million urban secondary school graduates were resettled in rural areas in the period 1969–73 alone (Chang, 1975). In Vietnam, the population of Ho Chi Minh City, some 3 million in 1975, was reduced 700,000 in 1977 and further annual reductions of 500,000 were planned, to meet an eventual city size target of 1 million (Lange and Kolb, 1980).

The demographic effects of these policies have been striking, but the social and economic costs, including the effects on rural destinations, remain unknown. It is not clear whether urban problems of un- and underemployment were simply shifted to rural areas. To be effective, such programs require stringent laws and administrative measures, massive propaganda, and authoritarian political regimes (Simmons, 1979; 1981). Because of this, and their restriction of free movement and choice of residence and employment, considered civil rights in many countries, rustication programs are unlikely to be adopted outside of the centrally planned economies.

Urban Accommodationist Programs

In contrast to policies designed to reverse or constrain metropolitan growth, accommodationist policies attempt to adjust to in-migration and growth by improving the urban habitat. Included under this rubric is a range of programs concerned with housing (including slum and squatter settlements), transport and communication, sanitation, government and fiscal management, and also attempts to decongest the metropolitan areas by developing dormitory towns and satellite cities (Laquian, 1981; Linn, 1979). Such programs, intended to promote urban efficiency, raise issues of equity: do the overali welfare and development needs justify the large investments involved, which generally reach only a small proportion of the population? In addition, such programs' possible effect of encouraging further migration to the city, which would only aggravate the problems they were intended to

relieve, requires further study. The need is for ameliorative programs that will increase urban efficiency without attracting excessive in-migration.

Attempts to Promote Growth in Smaller and Intermediate-size Cities

These attempts usually involve plans for growth centers and related regional planning measures. The earlier optimism regarding such urbanization dispersal strategies has given way to widespread pessimism, because the programs have generally failed to achieve expected growth in regional centers and there has been a notable lack of spread effects (Hansen, 1981). However, it is possible that the shortcomings may have resulted from failures to implement policies that remain only promulgated, as is apparently true in much of Southeast Asia (Salih et al., 1978:79). Elsewhere policy application may have been sporadic, and adequate time has rarely been allowed for expected results to be achieved. Despite the general disappointment with such policies, there have been notable successes, as in Korea (Mera, 1976). Since there are no clear alternatives to accommodating the enormous increases that will take place in Asian urban populations, other than permitting growth of metropolitan populations to reach unmanageable proportions, what seems to be needed is a reassessment of these policies—their objectives, selection of appropriate centers, measures, and timing—in order to frame more effective policies (Richardson, 1977). They also require integration into more comprehensive and balanced sets of urban and rural programs (Lo and Salih, 1978b).

Rural Development Programs

Disenchantment with the outcome of industrially based growth-center approaches, growing concern about the need to give greater attention to the rural sector, and the desire to reduce rural-to-urban migration have led to an increased emphasis on rural development programs. So-called integrated rural development programs ordinarily provide for coordinated provision of infrastructure and services in rural regions, and the development of an appropriate regional hierarchy of village and urban marketing and service centers. Examples in Asia include the Lampang project of Thailand, the Bicol project in the Philippines, and various rural development projects in the hill areas of Nepal. The relative recency of such projects has precluded definitive evaluation of their effects upon migration, which appear to vary depending on the

precise program components and the nature of the rural region and its component population. Although the programs appear to have reduced permanent out-migration in many cases, ". . . a more significant though little publicized effect . . . is the opening up of other migration and commutation alternatives: to other rural areas; to towns in the vicinity; and to other cities economically linked to the rural market towns" (Findley, 1981:166).

Land Colonization Programs

These schemes include Malaysia's FELDA projects, Indonesia's transmigration programs, the *terai* settlement projects of Nepal, and the Mahaweli project of Sri Lanka. They represent organized attempts to redistribute rural population from "overpopulated" to "virgin" or underutilized agricultural areas. The record of sponsored colonization schemes is mixed, but failures outnumber successes (Bahrin, 1981). Even when successful, land colonization schemes have a high cost per settler, if infrastructure costs are included. In Malaysia in 1976, costs per settler were US$10,000 for rubber projects and US$11,036 for oil palm projects, and in Indonesia's transmigration program in 1977, they were US$4,390 per settler (Laquian, Aquino, and Postrado, 1981: 14).[3]

Also a serious drawback is the so-called "second generation problem." Since land fragmentation is often prohibited in land colonization projects, most of the original settlers' children must eventually leave the projects, which in effect then only serve to delay rural out-migration. Spontaneous settlement generally accounts for 75 percent of new rural land settlement, and therefore more attention should be given to means to improve and channel such unassisted movement to "frontier" areas.

Not only does the experience of redistribution programs in affecting migration vary greatly by type of program, but also programs of a similar type vary greatly in outcome depending on the national context (Table 6). These differences suggest that details of program design, administrative structure and capabilities, political commitment, and so on, play a major role in determining the outcomes. Even allowing for

3 Since these costs include resource development as well as resettlement, they would have to be weighed against costs of creating alternative jobs in the rural or urban sector. Environmental costs, which may be substantial, are generally not included in the cost calculations.

TABLE 6 Evaluation of policies and programs by sources

Policies and programs	Goals	Effectiveness and efficiency	Target groups	Costs	Overall assessment
Rural development					
BIMAS program of rice production (Indonesia)	G	F	F	F	F
Saemaul Undong Movement (Republic of Korea)	E	G	G	G	E
Integrated rural development (Nepal)	F	F	F	P	F
High-yielding varieties (Philippines)	G	F	G	G	G
High-yielding varieties (Thailand)	G	F	F	F	F
Resettlement					
Transmigration program (Indonesia)	F	P	G	F	F
FELDA land development scheme (Malaysia)	E	G	E	G	E
Colonization of the *terai* region (Nepal)	F	P	F	P	P
Resettlement to Mindanao (Philippines)	F	G	F	F	F
Colonization projects, dry zone (Sri Lanka)	G	P	F	P	F
Resettlement program (Thailand)	F	P	G	F	F
Regional development					
Regional planning (Indonesia)	G	P	F	F	F
Regional development (Republic of Korea)	E	G	G	G	E
Regional planning (Malaysia)	G	F	G	G	G
Regional decentralization (Philippines)	F	F	G	F	F
Mahaweli development program (Sri Lanka)	F	P	G	G	F

Industrial estates and growth centers					
Industrial estates (India)	F	P	F	P	P
Industrial estates (Republic of Korea)	E	E	G	G+	E
Export processing zone (Philippines)	G	G	F	G	G
Accommodationist policies					
Resettlement of squatters (India)	F	F	G	P	F
Kampung improvement program (Indonesia)	G	F	G	G	G
Sites and services and upgrading (Philippines)	E	G	F	G	G
Low-cost housing (Thailand)	F	F	P	F	F

E = excellent
G = good
F = fair
P = poor

SOURCE: Laquian, Aquino, and Postrado (1981:19).

their influences, however, it is apparent from transnational comparison that the majority of such programs have been considered only fair or poor when evaluated on the basis of effectiveness, efficiency, or costs. In view of the considerable expenditures on such programs in Asia and the Pacific, or elsewhere in the developing world, this generally negative assessment raises the question of what might be done to make them more effective and cost-efficient.

FUTURE PROSPECTS

Unless some fundamental change occurs in the nature and implementation of population distribution policies, it is unlikely that future outcomes will be more successful than those experienced to date. What are the implications of past experience for research needs, desirable policy changes, and institutional implementation? Some speculations are offered below concerning the scope and institutional framework of population distribution policies, the need for intervention, selection of appropriate instruments, policy evaluation, and the data base.

Population distribution policies in relation to spatial economic planning, sectoral policies, and institutional framework

Spatial Economic Planning

The scope or domain of population distribution policies remains poorly defined and, one is tempted to add, poorly understood even by its practitioners. Economically-oriented spatial planners often treat the distribution of population as essentially synonomous with that of economic activity, thereby failing to take into account the disparities evident in many developing countries. Demographically oriented migration specialists and planners, on the other hand, often view population distribution and movement in isolation from the spatial economic context, and in their policy prescriptions assume that migration can be managed without reference to spatial economic and development planning. From an examination of population distribution programs, however, it is readily evident that they overlap with spatial economic programs, whether national, regional, urban, or rural. The instruments employed in such programs are essentially the standard measures of spatial economic planning. None of this should be surprising since the processes leading to spatial population distribution problems are similar to those leading to polarized economic development, and many of the remedial programs must also be similar.

Spatial population planning thus may be viewed as complementary to spatial economic planning, distinguished from the latter by its explicit concerns with population and its characteristics, including composition, which is often treated homogenously in spatial economic planning.

Sectoral Policies

The explicit population distribution policies and programs discussed earlier account for only a portion of the spatial effects of government policies. Macro- and sectoral economic policies may also have strong, if unintended and indirect, effects on population distribution as well as on economic activity (Richardson, 1977). Major areas of concern include various policies regarding foreign trade and exchange, domestic and international investment, taxation, interest rates, agricultural price supports or ceilings, wage regulations, social welfare programs, government procurement policies, and government institutional structures. From examination of selected Asian development plans, there is reason to believe that the spatial effects of various sectoral policies may contradict the goals of explicit population distribution policies (Fuchs, 1981a), although the lack of a methodology to measure precisely the net effects of various sectoral policies remains an obstacle to a full understanding of their spatial effects and the degree to which they outweigh explicit spatial policies.[4] Further research on the subject is a priority research need (Richardson, 1977). The challenge for policy purposes, as Richardson has noted, is not only to recognize and identify sectoral policy effects, but also to find alternative means of achieving nonspatial objectives with policy instruments that avoid undesirable spatial consequences. This must become a high priority for Asian and Pacific nations in order for them to avoid further wasteful expenditures on contradictory policies.

Institutional Framework

The limited success of existing population distribution policies reflects, in part, a failure to achieve adequate institutional coordination (Pryor, 1981). Such policies cannot be formulated or implemented in isolation, but must be integrated with national, economic development

4 One useful approach, although it would yield only a partial answer, would be to examine and assess spatial patterns of tax receipts and public expenditures, in other words, the redistributive effect of public sector finances (Bennet, 1979).

policies including specific multi-year development plans, national urban policies, and area development plans. Conceivably, various institutional mechanisms can be developed to achieve the required policy integration and no single model need be adopted or would be appropriate for all nations. What is required, however, is that spatial population planning be more closely linked to spatial economic planning and that economic planners become more sensitive to the demographic implications of their policies, while more demographic researchers and planners shed their innocence of spatial economic development processes and policies.

Goal definition

There are grounds for concluding that the mode of specifying objectives or goals is currently a major weakness in the population distribution policy process, and that the establishment of unrealistic or inappropriate goals may be a fundamental cause of the limited success achieved by nations attempting to manipulate their population distribution (Richardson, 1981). Some of these difficulties, and suggestions for their amelioration, follow.

First, in formulating population distribution goals, universal prescriptions cannot be employed; such goals must be formulated on the basis of unique national conditions, including the size of a country, its environmental and resource base, level of development, the structure and patterns of the economy, the dynamics and patterns of the population, the structure of its society, the form of government, and cultural and historical factors. That governments with widely differing national contexts have often adopted very similar goals, such as dispersed urbanization and limiting metropolitan growth, raises the suspicion that, rather than devising nation-specific goals, planners often resort to "borrowing" goals, or adopting those currently fashionable. An urgent and obvious remedy is for planners to formulate goals suited to the distinctive national requirements.

Second, there are no operational algorithms or other technical means of determining "optimal" distributions of populations. Existing approaches require data beyond the capacity of developing nations to acquire, or result in indeterminacy (Conroy, 1978; Willekens, 1979; Tan, 1980). Richardson's (1975) call for cost-benefit assessments of alternative settlement patterns has not yet resulted in operational examples. Planners must therefore accept the fact that for the foresee-

able future, the definition of goals will remain largely judgmental; thus it is especially important to ensure that goals are the result of informed judgment and not arbitrary or wishful thinking.

Third, spatial population goals, or spatial economic goals, are lower-order and not ultimate goals; they must be formulated as subsets of national economic or social goals, which typically include economic efficiency and growth, social equity and welfare, environmental quality, and other standards of well-being (Alonso, 1972). How these national goals are to be translated into spatial population goals, however, is not very clear, particularly in regard to efficiency and growth. Although the concepts of an optimal city size and an optimal rank-size hierarchy have been widely discredited, substantial controversy still centers on the question of the relative efficiency of various sizes of urban places. Useful here would be further empirical research in individual developing countries, perhaps applying Lo and Salih's (1978) suggestion that efficiency may vary with function as well as size (comparative sectoral efficiency), and incorporating social costs and benefits if possible. Since labor absorption will become an acute issue in the future for many Asian and Pacific nations, studies on the labor absorptive capacity within these nations in the rural and urban sectors, regionally, and by settlement size would be a highly useful prologue to goal formulation. Similarly, further study of labor markets and clarification of the spatial relationships among labor supply, job opportunities, income, and mobility is an urgent need (McGee, 1981; Standing, 1981).

Fourth, planners have formulated goals largely on the basis of assumed national and social benefits. Personal preferences, of course, may differ from the presumed social preferences, leading to migration and location choices that differ from planning formulated goals. Survey research on individual residential and locational preferences (e.g., Fuguitt and Zuiches, 1973) would be desirable if we believe that planners' goals should to some degree reflect the wishes of the people. Similarly, survey research on intended migration and mobility, which has been demonstrated as useful for prediction in developed nations (Speare, Goldstein, and Frey, 1976), might assist in formulating more realistic goals. Moreover, survey research on the actual economic and social costs and benefits accruing to various types of migrants to different types of destinations would prove useful in translating national efficiency and welfare goals into population distribution goals.

Fifth, in the absence of comprehensive mobility data, planners have concentrated almost exclusively on permanent migration as a subject of policy, excluding short-term and repetitive movements. This is a serious oversight since in many Asian and Pacific nations, nonpermanent forms of movement already form a large and growing part of total mobility patterns and have important economic consequences (Goldstein, 1978). Goals are therefore less comprehensive than they should be, omitting aspects of mobility (e.g., commuting) that may be highly relevant to the spatial development process. As a result, the interdependence among the various elements of mobility, and the degree to which one substitutes for another, are overlooked. This oversight argues for survey research to determine the relative incidence, pattern, economic significance, and linkages of the full spectrum of mobility processes in individual nations.

Sixth, the time periods involved in the mobility response to economic and other stimuli is unknown in most nations; this creates difficulties in formulating population distribution goals, their articulation with economic goals and development projects, and their incorporation into short-, intermediate-, and long-term development plans. Research to clarify the time periods of mobility response is thus also an obvious need from the standpoint of goal formulations.

Assessing the need for intervention

Since the vast majority of Asian and Pacific nations have already adopted policies designed to modify the rates and patterns of internal migration and population redistribution, further assessment of the need for intervention may seem unnecessary. Nevertheless, there is a continuing debate as to the need for such policies, which serves to weaken the political commitment to and effective implementation of the policies within the individual nations and to diminish the financial commitment of donor agencies. More accurate assessment of whether intervention is required in particular nations could conceivably remove or reduce intervention where it seems unnecessary and strengthen the political and economic commitments to intervention in those cases where it appears warranted.

Detailed evaluations of the arguments against and for intervention have appeared elsewhere (Mera, 1981; Stöhr, 1981) and need not be elaborated here. Essentially, the case against intervention rests upon the automatic equilibrating mechanisms postulated under neo-

classical economies, leading over time to equilibrium in the terms of trade and to spatial equilibrium in factor prices. Empirical support consists of various cross-national and longitudinal studies demonstrating convergence over time, as development proceeds, in personal and regional income disparities (Kuznets, 1955; Williamson, 1965; Alonso, 1980) accompanied by reduced urban primacy (El-Shakhs, 1972). The arguments for intervention essentially are that the assumptions of neoclassical economic theory and its automatic equilibrating mechanisms do not apply to most developing countries and, even if they did, few nations could afford to wait for the indefinite time lag required for equilibrium; intervention is therefore required to bring population distribution into better accord with resource and ecological patterns and to relieve political and social pressures (Stöhr, 1981).

Further general assessment of the need for intervention will, no doubt, proceed through elaboration of theoretical and comparative studies. From the standpoint of determining the need for intervention in a given country, however, more fruitful approaches may be suggested. Particularly useful would be studies examining the demographic and socioeconomic effects on origin and destination areas of existing and projected mobility patterns. Comprehensive research that examined demographic consequences and the social and economic costs and benefits to individuals, households, and communities in source and destination areas—covering the full range of mobility—would add enormously to an accurate assessment of intervention needs. (Detailed suggestions for such research may be found in Simmons, 1981, and Hugo, 1981b.) It would also serve to remedy a major weakness of the neoclassical approach, which equates migration with mobility and, in treating migration as simply a movement of a production factor, commonly ignores social costs borne by the migrants, as well as sending and receiving areas. (This criticism is elaborated for neoclassical studies of international migration in OECD, 1979:30.)

Improvement of instrument selection

To date there has been no systematic evaluation of the effectiveness of the individual instruments employed as part of population redistribution programs (Table 5). In the absence of such evaluations, one alternative method for assessing their likely effectiveness is to consider the measures in relation to our knowledge of migration determinants. A general study along these lines has concluded that there may be con-

siderable scope for improving the effectiveness of instruments, were they selected to match more closely the determinants of migration behavior on a country-specific basis (Fuchs and Demko, 1981). Some of the specific problems are outlined below.

The majority of measures employed are economic and related to increasing employment opportunities. This would seem appropriate in view of the recognized importance of employment and income as primary migration determinants. However, many of the instruments are quite indirect (e.g., infrastructure investments) and thus may operate in a weak fashion and over a very long period of time.

There is a heavy reliance also upon social infrastructure, for example, housing, schools, and medical and other services. It is not clear how important these amenities are as migration determinants. Furthermore, the measures may be so widely applied over a country as to negate desired spatial demographic effects.

The known effect of distance as a deterrent to migration is largely neglected in current instruments and programs, except for limited use of relocation grants. A possibly more useful approach would be to address redistribution programs geographically—toward likely migrants from source areas near the proposed destination area, thereby taking advantage of the distance bias.

Migrant selectivity, which plays a major role in the composition of regional flows, needs to be taken into account to a greater extent than at present. Programs and measures should be addressed toward subgroups most likely to move or stay, as called for by particular programs and objectives.

The importance of information in inducing and directing migration is similarly overlooked in most redistribution programs and measures. In the absence of formal information programs, migration streams become biased toward the metropolis, which receives the most media attention and is likely to have the largest pool of migrants informally transmitting information to friends and relatives in source areas. The use of information measures—through schools, government offices, and the media—is thus potentially a powerful tool for affecting both decisions to move and destinations. It would have the advantage of being relatively low in cost and the potential of showing results much more quickly than many economic measures. Greater focus on this instrument also gives population distribution policies the opportunity to make a more distinctive contribution to spatial development programs.

In addition to a more rigorous evaluation of programs and instruments, various types of additional research would seem desirable to bring about the selection of more appropriate policy instruments.

First, further elaboration of spatial development theory is needed. As Richardson (1973:140) noted some years ago, Friedmann's (1966) center-periphery model is still the "best formulated construct in a haphazard and fuzzy literature." Promising directions for improvement of the basic concept have been pointed out by Richardson himself; Friedmann (1973); Lo, Salih, and Douglass (1981) with their macrospatial model; and Logan (1981), who also calls attention to the need to treat national spatial development as an open system subject to trade, investment, and other international forces. Work along these directions is likely to confirm the need in spatial development and population planning for intervention in regard to such international factors and thus add a dimension missing from current programs.

A second need is for improved methodologies linking macroeconomic and demographic growth models. The current cleavage between these models handicaps both economic and demographic planning. Attempts to link regional input-output and multiregional demographic models seem particularly promising (Gordon and Ledent, 1980; 1981).

A third need is to reformulate macrolevel models of migration to include more variables that are subject to policy intervention. Macromodels of migration, generally based on cross-sectional analysis of census data by territorial units, have provided a broad overview of the spatial determinants of migration, useful to policymakers (Yap, 1975; Todaro, 1980). However, they also have serious limitations, which derive largely from limitation of their data sources: the focus on migration and exclusion of other forms of mobility and the serious and biased underestimation of migration that results from use of census temporal and territorial definitions of migration. Despite these limitations, there is still scope for substantially improving their utility for policy purposes by reformulating the variables employed. Such models commonly attempt to explain rates of migration between areas on the basis of wage or income levels, unemployment rates, degree of urbanization, and distance between origin and destination. The wage or income and employment variables may be subject to policy intervention, but distance and degree of urbanization are not potential policy variables. Distance should be decomposed into the constructs that it represents in reality and that could be subjected to policy intervention:

travel time and costs, and measures of information or contact. Similarly, degree of urbanization should be reformulated as composite or individual measures of the various urban services and amenities. The migration elasticities derived from such macrolevel models, reformulated to accord with policy-relevant variables, should thus be much more useful in the selection and design of appropriate instruments and programs.

Microlevel studies

To date macrolevel migration models have been more widely employed than microlevel models for policy purposes. In the future microlevel studies, focusing on the behavior of individuals and households, may prove more useful (De Jong and Gardner, 1981). They afford the opportunity for covering the full scope of mobility behavior and for a deeper and broader understanding of migration determinants than is possible from macrolevel studies, which must generally infer determinants from place attributes. Whether microlevel studies will achieve their potential for contributing to policy and planning will depend on the degree to which they are structured and designed to answer policy questions. The majority of such studies to date unfortunately have not adopted this perspective and have thus added little of direct use to policymakers (Simmons, Diaz-Briquets, and Laquian, 1977).

POLICY MONITORING AND EVALUATION

The limited success of population distribution policies can be traced in part to the neglect of policy monitoring and evaluation. As indicated earlier, formidable difficulties face those evaluating the effects of population distribution policies (see also Chan, 1980). As a result, most studies are descriptive, and evaluate by measuring achievement versus targets. This approach is inadequate because targets may be unrealistic and, in any event, it fails to account for what would have happened in the absence of policy implementation or to identify the actual effects of policy.

Various forms of trend or time series analysis are generally employed in public policy evaluation (Nachmias, 1979); the difficulty remains of separating autonomous from policy-induced effects. Here quasi-experimental research designs may prove useful. One possibility is to derive a general national regression equation with population

growth or net migration rates by areal units or the dependent variable, using a set of socioeconomic variables as the independent variables. The equation can then be employed to predict either autonomous population growth or net migration. Policy effects can be estimated by comparing actual and predicted change for regions subject to policy programs or measures (Folmer, 1980).

Another possibility is to use control areas as a basis for trend comparison. Rural areas designated for development as land colonization schemes, for example, could be compared with those settled only by spontaneous migration, areas designated for integrated rural development compared with those not so designated, "growth" centers compared with intermediate cities not subject to policies, and so on. Selection of appropriate control areas to ensure comparability in socioeconomic and demographic structure is critical and can be accomplished through factor analysis, cluster analysis, and shift-share techniques (Merrifield, 1981).

In addition to measuring the overall effects of policies, planners will wish, if data sources permit, to study the effects of individual policy instruments in order to modify existing policies or improve future ones. Useful techniques for conducting such research include simultaneous equations and path analysis (Berentsen, 1978). Special surveys may also be used for evaluation and, when combined with a battery of the macrolevel evaluation methods, may be quite comprehensive (see, e.g., Moore and Rhodes, 1973; 1977).

DEVELOPING AN ADEQUATE DATA BASE

A major obstacle to improving population redistribution policies in the Asian and Pacific region, as elsewhere in the developing world, is the limited information available to researchers and planners about migration and mobility (Goldstein, 1981). Most national policies have, of necessity, been framed without adequate information about the types, volumes, and spatial patterns of mobility; characteristics of various types of movers and nonmovers; the reasons for moves and choice of destination; the satisfactions and dissatisfactions resulting from moves; future mobility intentions and location preferences; links between migrants and source areas; and the consequence of movements upon individuals, households, and the source and destination areas.

The 1980--81 series of censuses conducted in the Asian and Pacific

region will substantially improve data on migration available to planners and researchers, but will leave an inadequate data base for most planning and policy purposes (ESCAP, 1981:3–5). To conduct policy-related research of the sort suggested above, it will be necessary to rely on specialized surveys. The National Migration Survey proposed for the ESCAP region, in conjunction with censuses and other sources, would provide a comprehensive data base for such policy-related research (Fuchs, 1981b). If development planners in the Asian and Pacific region are seriously interested in improving the effectiveness of population distribution policies, they would be well advised to support such migration surveys, for without such an advance in the data base, major improvements in spatial population policies are not likely.

SUMMARY AND CONCLUSIONS

The first part of the paper presents a general overview of population distribution policies in the Asian and Pacific region. The major findings may be summarized as follows:

All but two of 30 Asian and Pacific nations are dissatisfied with their current distribution of population; half perceive their distribution as "extremely unacceptable" and in need of "radical intervention."

The most common goal is to decelerate or reverse rural-to-urban migration. Altering rural population configurations is a more common objective than altering urban configurations.

Spatial population distribution programs are commonly part of more general spatial development programs. Often the population objective is secondary to economic objectives.

The instruments employed encompass economic, administrative, and social measures. The emphasis is generally on economic measures intended to affect spatial demand for labor.

The results of programs vary widely from nation to nation and from program to program, but in general they have demonstrated quite limited effectiveness. Rustication programs have sometimes achieved striking spatial demographic shifts but at unknown social and economic costs. Closed-city programs may have slowed metropolitan growth, but at the expense of a rise in corruption and other undesirable effects. Accommodationist policies raise questions of social justice and of their effect on stimulating further metropolitan growth. Intermediate-city programs have generally failed to affect growth and

spread as expected. Land colonization schemes list more failures than successes and have proven expensive. Rural development schemes have increased mobility options for rural residents but have not stopped rural out-migration.

The second part of the paper considers apparent policy deficiencies and suggests needed research and other possible areas of policy improvement. The major arguments are as follows.

Population distribution policies must be viewed as complementary to spatial economic policies and more carefully integrated into national economic planning. Economic planners must become sensitive to the demographic implications of their policies, and demographic planners more conscious of spatial aspects of development processes and policies.

The spatial effect on the population of macro- and sectoral policies may outweigh those of explicit population distribution policies. Assessment of these policies, with a view to modification if required, is a major, and perhaps the highest priority, need.

Policy goals often appear to have been borrowed rather than independently designed to fit national characteristics and contexts. Further study of labor markets and the spatial relationships among labor supply, job opportunities, income, and mobility is urgently needed on a country-by-country basis, as is survey research to establish individual location preferences, mobility interactions, and benefits and costs accruing to various types of migrants to different destinations.

The need for intervention should be reassessed in the individual nations on the basis of studies of the demographic and socioeconomic consequences of current and projected mobility patterns upon individuals, households, and source and destination areas.

There appears to be considerable scope for improving programs by selecting instruments more closely matched to the determinants of migration behavior in individual countries. Distance deterrence and migrant selectivity should be incorporated into programs. Information measures are particularly promising because of the possibility of relatively low costs and shorter time periods than those demonstrated by commonly employed economic measures. Both macro- and microlevel studies, structured to include policy-relevant variables, have a role to play in improving program design and instrument selection.

An improved data base is fundamental to the research required for policy improvement. The 1980–81 round of censuses in the Asian and

Pacific region will be inadequate for planning and policy purposes. Economic planners must support migration surveys to provide the comprehensive data base necessary for policy research.

In an earlier examination of population distribution policies in developed countries, the author and a collaborator concluded that "knowledge in many areas is below the level needed to accurately guide policymakers," and that without a deeper understanding of the subject, governments "risk intervening in processes inadequately understood to achieve ends irrationally defined" (Fuchs and Demko, 1979:457). This unhappy conclusion applies equally to Asia and the Pacific, where the need for intervention is greater, the probability of success lower, and the costs of failure are likely to be higher.

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Circulation and interpersonal networks linking rural and urban areas: the case of Roi-et, Northeastern Thailand

Paul Lightfoot,
Theodore Fuller,
and Peerasit Kamnuansilpa

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PREFACE

The study reported here was funded by the Ford and Rockefeller Foundations' joint program for research on population and development, with material assistance also from the authors' respective departments. This is a revised version of a paper presented at the Population Association of America meetings session on Forms of Impermanent Mobility, Washington, March 1981. The authors gratefully acknowledge comments made by Professors Sidney Goldstein and Murray Chapman on a preliminary draft of this paper.

ABSTRACT Recent studies in various Third World countries have revealed high rates of movement between rural and urban areas. This paper describes movement originating in part of Northeastern Thailand, a region traditionally characterized by high rates of movement but for which there are no recent microstudies of the movement process. Data are derived from complementary surveys conducted in Roi-et Province and Bangkok in 1978 and 1979. The paper analyzes movement in relation to four categories of interpersonal networks characteristic of Northeastern Thai society. These networks condition not only the characteristics of movers and their spatial patterns of movement, as has been repeatedly demonstrated elsewhere, but also the seasonality of movement. Movers are subject to the competing claims of village-based and urban-oriented networks; for most, the opportunities afforded by the latter frequently supersede obligations toward village-based networks, resulting in a lack of articulation between temporal patterns of movement on the one hand and demand for farm labor on the other. The question arises as to whether the cash remitted by rural-to-urban movers compensates for the disruptive effects of movement on local labor supplies.

Literature on modern Third World studies is replete with dualistic classificatory schemes, such as modern and traditional, capitalist and noncapitalist, urban and rural, proletariat and peasantry. The empirical basis for such dualisms as dichotomies is highly questionable; as an analytical framework a dualistic view obscures dialectical processes of contact, interaction, and change between social and economic milieux that at the extreme may be very different. Whether interaction results in a generally benevolent convergence, as the neoclassicists would have it, or in divergence and the reinforcement of the basic characteristics of each, as in underdevelopment theory, is not the main issue to be pursued here. What is important is that interaction occurs, and that as a result boundaries between differing social and economic systems and interest groups become at best fuzzy boundaries, if it is meaningful to speak of boundaries at all.

Migration between rural and urban areas is one aspect of these dialectical processes. Much of the significance of migration for modernization and development lies in its role in linking places that are spatially distant and socially and economically distinct. Migrants experience new and different physical environments, behavioral precepts, earning

power, and forms of organization, socially and at work. If categorical terms are to be used, then it can be said that migration brings peasants to work as and with proletarians, students, minor officials, and petty capitalists. The migrants change as a result; but more importantly, they consciously or otherwise introduce some of the resources and trappings of urban culture into their villages. Physically returning to the villages to visit briefly or to stay and work makes them all the more influential as propagators of some image of the city. They may return as teachers, as peasants with their "peasantness" newly self-conscious and politicized, as importers of petty capitalism into their villages, or, most likely, as peasants with a little extra cash and a new gloss of urbane sophistication or "modernness." Whatever happens to the individuals, migration influences their households and large sections of their village communities. Nonmigrants find themselves confronted in their own villages with concrete or imagined facets of urban life, and they share whatever money the migrants send or bring home.

The purpose of this paper is to analyze rural-to-urban movements originating in Roi-et Province, Northeastern Thailand, in relation to the various social and economic networks within which any Northeastern farmer is likely to be enmeshed. The term "networks" is used here to mean groups of people linked by a common interest, obligation, or dependence of a social, economic, or political nature, and based on direct personal acquaintance and communication. Farmers or members of farming households are sure to be members of interlocking networks within their home villages. The networks serve to promote essentially village-centered values and obligations, and to make available social, economic, and political opportunities for individuals within the village. One of the effects of modernization is the spatial extension of interpersonal networks, including the extension into towns of originally village-based networks, and the emergence of entirely new networks that link rural and urban areas. These rural-urban networks, superimposed on traditional village networks, serve to promote their own values, obligations, and opportunities, which may or may not be compatible with those of the village.

Using this conceptual framework for rural-to-urban movement, one can ask what opportunities and obligations tend to be associated with each of several types of networks, how the competing claims of different networks are resolved by movers and prospective movers, and what the result is for the functioning of those networks. Analysis in these

terms will illustrate the complexities of the process and explain why several common generalizations about cityward movement will not withstand close scrutiny in microstudies.

Various studies in other Third World countries have analyzed rural-to-urban movement in relation to voluntary organizations, in particular decisions about moving, the adjustment of movers to urban life, and the maintenance of links between places of origin and of destination (Abu-Lughod, 1961; Bruner, 1961; Little, 1965, 1973; Skeldon, 1976, 1980). These studies have focused on the urban end of the movement system. The voluntary organizations are essentially urban rather than rural phenomena, and they tend to be organizations established and run by migrants for the benefit of migrants and their home areas.

In their studies of Thailand, Textor (1961) and Fuller (1977) have indicated that identifiable organizations such as clubs and village associations, which have formal or semi-formal structures, are not important among recent rural-to-urban movers, partly because of the general lack of affinity among Thai people for such groups and also because of the short-term, circular nature of much of their movement (see Nelson, 1976). Consequently, the networks we discuss here—household, peer group, labor-exchange group, patron-client links—are characteristic of Thai society generally, not simply of migrant or otherwise spatially mobile Thais. Moreover, the movement process is analyzed more from the rural than from the urban standpoint, in order to begin to understand the effects of movement on the areas of origin.

RURAL-TO-URBAN MOVEMENT IN THAILAND

The main difficulty in establishing a general picture of the importance of cityward movement as a linking process in Thailand is inadequate measures of rates of movement. For the most part, estimates of these rates have been based on the decennial census and on other survey data that cover only long-term moves. The Thai census defines migrants as people whose place of "normal" residence was different on census day from that five years previously. The word "normal" is important, because it is intended to exclude people who have lived in a different place for less than two months. Thus the census estimate that 5.3 percent of the population had migrated between 1965 and 1970 cannot be taken as a measure of the total volume of movement.

Microstudies conducted in Thailand indicate that rates of rural-to-

urban movement are far higher than the census suggests. Such movement includes local circulation between rural areas (van Roy, 1971; Moerman, 1968; Kirsch, 1966; de Young, 1963; Singhanetra-Renard, 1981) and movement to provincial towns (Lefferts, 1974) and to Bangkok (Klausner, 1972; Textor, 1961) as a means of extending the earning potential of rural households. Working with national-level surveys, Goldstein et al. (1977) found a high degree of continuing interaction between urban migrants and their home villages. Their study suggests that migration plays a role as an agent of change in rural areas independently of the physical return of the migrants.

Most of these observations of high rates of mobility have been qualitative, and there is as yet no reliable basis for estimating total rates of movement beyond the particular local areas investigated intensively in microstudies. Keyes is more precise: he found in his study of villages in Mahasarakham (Northeastern Region) that 71 percent of men of ages 20–39 had lived a month or longer in a city, and 52 percent had lived in Bangkok (Keyes, 1966). More recently, Lauro (1979) has provided the most detailed analysis yet available of movement, principally circular movement. In the village he studied in Ayuddayah Province (Central Region), he found that "over 13 percent of all villagers were regularly away from the community for several months each year" as "seasonal migrants" (Lauro, 1979:251). In total, 35.5 percent of villagers had ever been "seasonal migrants," in the sense that "during periods of reported residence elsewhere they had returned to the community to participate in rice farming activities"; 17.9 percent were classified as "return migrants," having returned to the village after an absence of one year or more. An important finding from Lauro's survey is that the rate of seasonal movement had increased dramatically, an upsurge first occurring in the early 1960s. The number of villagers becoming seasonal movers for the first time tripled between the two five-year periods of 1957–61 and 1962–66. Further substantial increases occurred during the mid-1970s, up to the survey year of 1976. Expressed in person-years of seasonal migration as a percentage of total person-years lived among people 15–64 years old, the rate of seasonal movement tripled from the period 1962–66 to the period 1972–76, from 11 to 33 percent (Lauro, 1979:254). By the mid-1970s, approximately half of all seasonal migrants were moving to Bangkok.

Rates estimated by Singhanetra-Renard (1981) for movements to

towns from a village near Chiengmai are lower than those computed by Lauro, and the movements less oriented toward Bangkok. No comparable estimates have yet been published for the Northeastern Region. In 1979, however, the Labor Department surveyed village headmen throughout Roi-et Province in an attempt to estimate the numbers of villagers who sought work in other provinces "after the harvest." The unpublished statistics indicate that, for the province as a whole, 9.7 percent of the rural population migrated in that one season alone. Although the accuracy of the survey is difficult to substantiate, the proportion is consistent with recent findings in six Roi-et villages, as discussed below.

THE STUDY AREA

Roi-et was settled relatively early in the history of the Northeastern Region, and throughout the nineteenth century it was one of the main centers of economic and political activity beyond Korat. It became and remains the most densely settled Northeastern province, with 133 persons per square kilometer, compared with 93 for the region. But the combined effects of events in the last 50 years have created a social and economic environment highly conducive to the outward movement of the population.

The influences of the modern Thai state and its commercial networks have penetrated the province enough to reduce the death rate and cause population growth there to accelerate rapidly, reaching 3.3 percent per year during 1970–76; to create a strong image in the minds of the people of a materially better life elsewhere, through the rapid economic growth of Bangkok and of mass communications (Lightfoot et al., 1981); and to make distant places far more accessible than ever before, through the rapid improvement of transportation services. Atsamat, a district town of 2,000 inhabitants, has a direct and inexpensive twice-weekly bus service to Bangkok, 700 kilometers away.

Yet in the face of these changes little has occurred locally either to provide for the needs of greater numbers of people or to improve their living standards. Roi-et has practically no frontier land where the agricultural area could be extended. Neither traders nor the government has done much to intensify and modernize agriculture, which is still dependent almost everywhere on traditional crops, seed varieties, farming techniques, and rainfall rather than on irrigation. There has been